

## **A mouse guard made from aluminum foil tape**

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Experiment in progress:

Aluminum foil tape (metal duct tape), coated with oil, can be used as a non-climb barrier strip against mice (Figure 1). The aluminum foil tape covers rough surfaces, like concrete, plaster or wood, and identifies the location of the oil-wiped surface. A thin coat of motor oil on the top of the aluminum foil tape make the surface slick and reduce traction. Food-grade oil is not recommended because mice may eat the oil and, in the process, chew the tape. The mouse guards can be use on concrete, metal, plaster, plastic or wood surfaces--for example, grain barrels, metal bins, wood posts, sidewalls, and concrete stem wall of buildings. For rough surfaces, apply spray-on adhesive before attaching the aluminum foil tape.

Aluminum foil tape with acrylic or rubber adhesive is available in 1 to 3 mils. (This measurement does not include the thickness of the adhesive.) Tapes with acrylic adhesive can tolerate a higher temperature range (250-325 degrees F; 121-162 C) than those with rubber adhesive (150-200 degrees F; 66-93 C). However, rubber adhesive adhere to wider range of surface textures.

- o "Nashua Tape Products" aluminum foil tapes are available with acrylic or rubber adhesive; and come in 1.75, 2, and 2.3-mils. [covalenceadhesive.com](http://covalenceadhesive.com).
- o "Shurtape Technologies" aluminum foil tapes are available with acrylic or rubber adhesive; and come in 1.5, 2, and 3-mils. [www.shurtape.com](http://www.shurtape.com).
- o "Intertape Polymer Group" aluminum foil tapes are available with acrylic or rubber adhesive; and come in 2-mils. [www.intertapepolymer.com](http://www.intertapepolymer.com)

Results:

1. Mice can climb in a 5-gallon bucket containing food. Mice can climb in the same bucket after attaching an aluminum foil tape on the outside of the bucket (Figure 1). Mice failed to climb in the bucket when motor oil was applied to the aluminum foil tape.
2. A removable 12-inch tall galvanized sheet metal panel was placed across the floor of a barn door as a mouse guard (Figure 2). Mice and rats can climb over the sheet metal. However, mice cannot climb over the sheet metal when motor oil is wiped on the sheet metal. (No test conducted on rats' ability to climb over 12 inch oil-wiped sheet metal.)
3. Two 55 gallon barrels were used for storing grains. Mice are able to climb in and out of one barrel. On the second barrel, mice can climb in but cannot climb out. The difference between the two barrels is a harder and smoother inside lining.



Figure 1. 5-gallon bucket with aluminum foil tape as non-climb barrier strip against mice, rolls of aluminum foil tape and cans of spray adhesives.

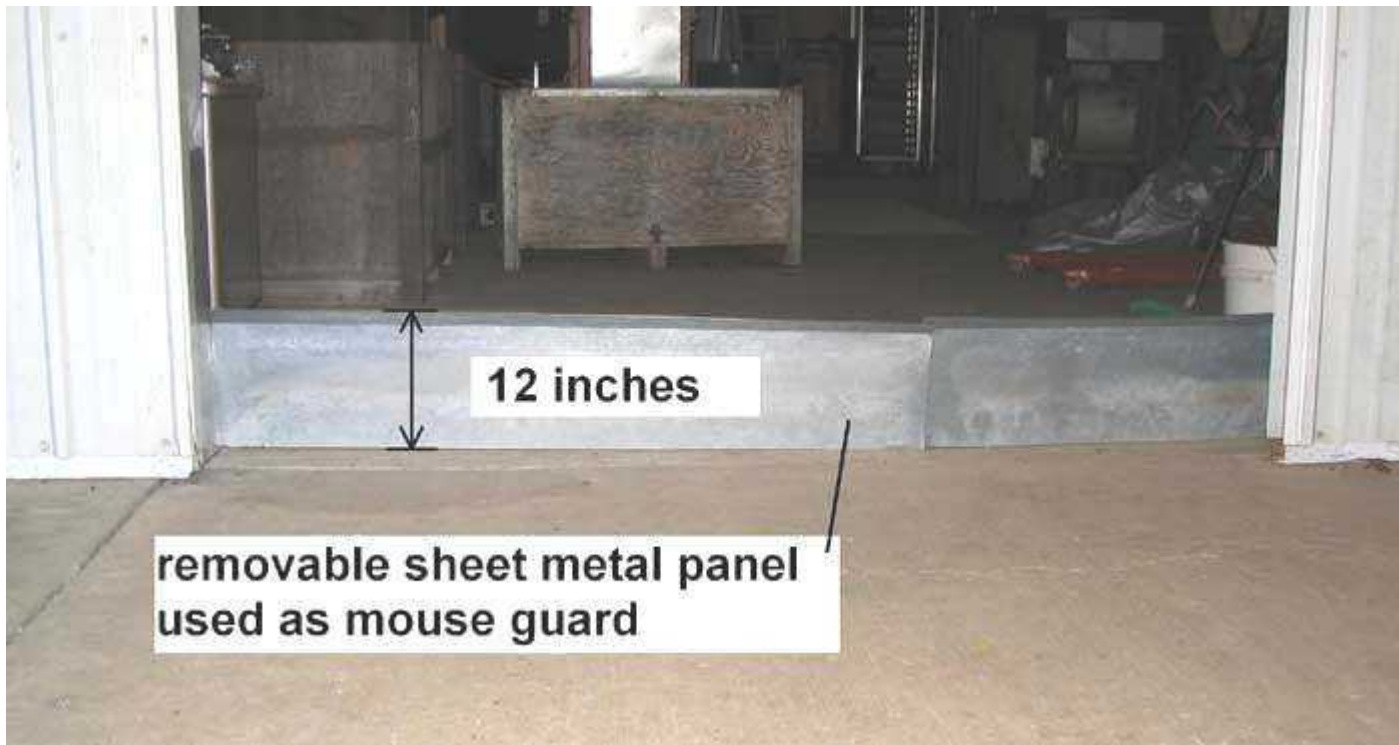


Figure 2. A non-climb barrier against mice using sheet metal panels. The removable, oil-coated panels are placed behind the sliding barn door.

Note: mention of product and company names does not imply endorsement from I-Tech.